



Andrew Davis Tucker / Augusta Chronicle

Under the Big Sky May 15, 2008

We've had our second severe thunderstorm warning of the season, with nickel size hail in northern McCone County, and we also had a spot near the Lindsay Divide with pea size hail that accumulated pretty deep last Tuesday. The lightning with the multicellular storms this past Tuesday caused some concerns with a few little league baseball games around the region, and we're working on getting safety information to coaches and umpires. Remember to utilize the 30/30 rule for lightning safety when you are outdoors!

Lightning 30/30 Rule:

- When you see lightning, count the time until you hear thunder. If it is less than 30 seconds, then people should be sent to a safe sturdy building, or to their vehicles.
- Wait 30 minutes after the thunder and lightning have ended before resuming your outdoor activity.

Recent Major Natural Disasters US and Globally

Chinese Earthquake: A massive earthquake struck central China on Monday May 12th. At least 8,500 people are dead, with many more trapped in buildings. The earthquake measured 7.9 on the Richter scale. In one province, 80% of the buildings had collapsed.

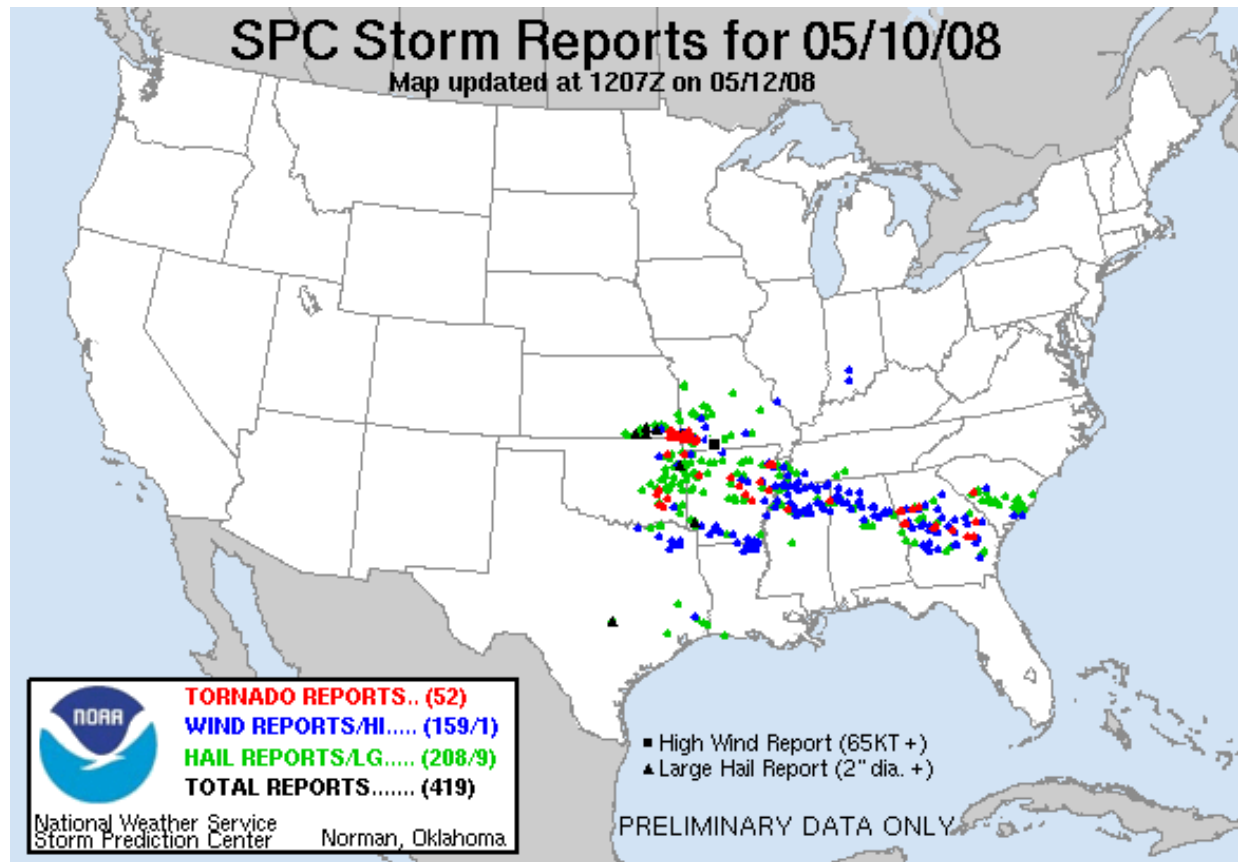
<http://www.msnbc.msn.com/id/24573168/>

<http://www.reliefweb.int/rw/RWB.NSF/db900SID/YSAR-7EKMHW?OpenDocument>

Severe Storms plague the central U.S.: At least 23 people are dead and over 150 injured after a round of severe weather that occurred this past weekend. The storms struck from eastern OK/SE Kansas and southeastward into Georgia and South Carolina.

<http://www.msnbc.msn.com/id/24558648/>

<http://www.cnn.com/2008/US/weather/05/12/severe.weather/index.html#cnSTCText>
NWS Tulsa: http://www.srh.noaa.gov/tsa/weather-events/may10_2008/may10_2008.htm
NWS Springfield, MO: http://www.crh.noaa.gov/sgf/?n=may10_2008_tornadoes
NWS Atlanta: <http://www.srh.noaa.gov/productview.php?pil=pnsffc>
NWS Little Rock: <http://www.srh.noaa.gov/lzk/html/svr0508c.htm>

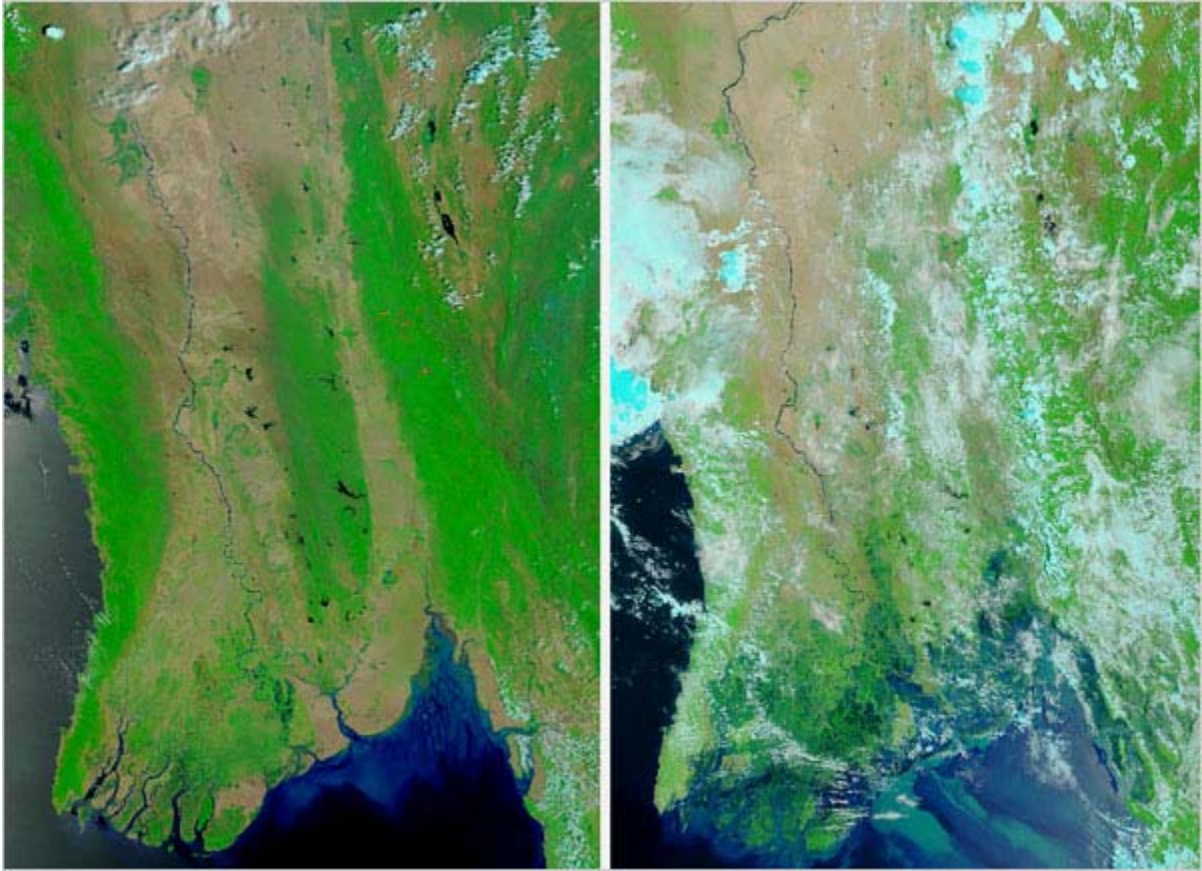


Cyclone Nargis – This category 4 cyclone (hurricane) struck the country of Myanmar (formerly known as Burma) on May 2nd and 3rd, bringing with it a massive storm surge of at least 12 feet of water. This country has a low lying delta on its southern perimeter along the Indian Ocean. Currently death estimates are 23,000 dead and another 42,000 missing. It is expected the final toll could reach 100,000, especially with the government's reluctance to allow any foreigners into the country and with contaminated water, and little food in the area, people who survived may actually become sick and die as a secondary impact of the storm. Anywhere from 1.5 to 2 million people are without shelter. There are currently 26 non-profit/non-government agencies waiting to come in, and only 3 have been approved to come into the country. The UN has 24 agencies waiting to come in, and only one has been allowed so far. The following links are showing current relief efforts in the area, as well and a cool interactive application done by the AP showing the impacts of the cyclone.

<http://www.reliefweb.int/rw/dbc.nsf/doc100?OpenForm>

http://hosted.ap.org/specials/interactives/international/myanmar_cyclone/index.html

Before and after European MODIS satellite imagery of Myanmar:



Chilean Chaiten Volcano



The Chaiten Volcano started erupting on May 3rd. Over 5,000 people have been evacuated so far. There are some amazing images online, including some lightning that occurred as this volcanic updraft met with some instability and created a thunderstorm.

- http://www.dailymail.co.uk/pages/live/articles/news/worldnews.html?in_article_id=563975&in_page_id=1766&ito=1490
- <http://www.independent.ie/world-news/south-america/sleeping-giant-awakens-again-1368896.html>

Drought Impacts Deepen in Australia:

Australia has experienced problems with severe drought for at least the past seven years. A recent article reported that the government is planning on spending 2.9 billion dollars to purchase river water from farmers. The larger urban areas are not receiving the rainfall they had in the past, and while they are working on conservation measures, they still have a shortfall. Australian agricultural interests are not sure that reducing their agricultural exports to accommodate reduced water supplies is in the best interest of the farmers with a global food shortage and inflation problems.

<http://www.msnbc.msn.com/id/24373612/>

<http://www.nytimes.com/2008/04/17/business/worldbusiness/17warm.html?hp>



What is an Area Forecast Discussion??

In my recent travels throughout the region, one of the questions that came up was what is the Area Forecast Discussion (AFD), and what are all these models we keep talking about? (They aren't the Sports Illustrated kind!) The AFD was a product used internally to the NWS for many years so that forecasters from one office to another could see what their counterparts were thinking. In the early 90's, computer savvy college students figured out how to grab the information and started posting it on their universities websites. It was full of acronyms and not easy to decipher for the general public, and as a college student, I even stumbled through reading something that was nothing but acronyms. With the internet being such a popular place for information by the late 90s, the AFD became a product that enough people had seen and liked and it became a product we issued for anyone to use, and we had to go back to writing in proper grammar with hardly any acronyms at all. In fact, next to the public forecast, I think the AFD is the second most popular product we issue in Glasgow. The AFD today is a product that allows the public to see the thought process of the forecaster, and perhaps see how confident we are in the forecast, or what the computer models are/or are not showing. We update it 4 times a day, around 3 am, 10 am, 2 pm and 8-9 pm in the evening. The AFD is linked on our website under the Forecasts section as "Text Discussion" or you can quick link to:

<http://www.wrh.noaa.gov/ggw/xafd.php?wfo=ggw&sid=GGW&pil=AFD&format=pre>

We have computer models (RUC, NAM/ETA, GFS, ECMWF, UKMET, Canadian, etc) that run different mathematical equations and produce weather forecasts for us to use as guidance. Some models only go out to 12 hours, while others will go out to 240 hours (10 days) or more. Some have higher resolutions than others. All models have biases that forecasters get to learn about as they become more seasoned year after year with forecasting in a region. From time to time "modelers" who write the programs will make updates to include new scientific information, but then new biases will appear. Our forecasters utilize the models, but you are getting a forecast that has human making the final decision. The Weather Channel, and many other websites that provide forecast information are generally run strictly off of what the model outputs. You can look at some of the model data on the internet. A good site is:

<http://www.rap.ucar.edu/weather/model/>

Another site within NOAA is: <http://www.nco.ncep.noaa.gov/pmb/nwpara/analysis/>

For a more detailed description of the various models, go to:

<http://www.unidata.ucar.edu/data/models.html>

NWS Glasgow Happenings:

Glasgow Kiwanis: I spent a lunch hour with the Glasgow Kiwanis and spoke to them about the CoCoRaHS (Community Collaborative Rain, Hail and Snow) program in Montana. If you are not signed up as a CoCoRaHS observer, please do so! The reports we've received in recent weeks have been very helpful to the NWS offices, the state Drought Advisory Committee and to FSA personnel working on drought declarations. To join the program, go to the website, (www.cocorahs.org) and sign up by clicking on the "Join CoCoRaHS" icon on the right side of the page.



Hydrometeorological Prediction Center: One of our lead forecasters, Greg Forrester, was selected to participate in a forecaster familiarization visit with the NWS Hydrometeorological Prediction Center. They are the ones who are looking at the forecast days 1-7 on a large nationwide scale, and provide many of the graphics discussed in the previous edition of Under the Big Sky. He will get to see how they put their forecasts together, and learn more about the products they issue. Then, he'll share that information with the NWS Glasgow staff to better utilize their data in our forecast process. Greg loves to travel and bike, so he actually drove all the way to Washington D.C (Camp Springs, MD actually) and back.

Hurricane Katrina: Prairie Ridge, a retirement facility in Glasgow, asked me to come and give a presentation on the rebuilding efforts of New Orleans based on my visit there in January. It was an excellent crowd there, with about 20 people attending, and many had great memories to share of New Orleans in the 50's, 60's and 70's.

Skywarn: Only a few classes left!

May 13, 2008	Malta	Library Basement
May 15, 2008	Glasgow	Long Run Fire Dept. –sponsored by Valley County Search&Rescue
May 19, 2008	Opheim	School
May 27, 2008	Poplar	TBA-sponsored by Fort Peck Tribal Health